

Application No. 10/772,236

Attorney Docket No. XA-10032

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for manufacturing a clutch housing, comprising:

a first step of forming a work into a pre-product having a shaft portion and an outer drum portion enclosing the shaft portion integrally with the shaft portion;

a second step of working the pre-product, including forming a hole in said shaft portion, said hole extending substantially perpendicular to an axial direction of said shaft portion; and

a third step of providing a spline on an inner periphery of the outer drum portion by flow forming, and forming the pre-product into an almost completed product,

wherein in the first step, an outer peripheral cylindrical portion of the outer drum portion is formed while being offset in an axial direction with respect to the shaft portion so that it is not opposite, in a radial direction, to at least part of the shaft portion in a radial direction a region where said hole is to be formed in the second step a radial direction.

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2. (Currently Amended) The method for manufacturing a clutch housing according to claim 1, wherein the working of the second step comprises forming ~~oil~~ a plurality of said holes in the shaft portion, and forming a groove on an outer periphery of the shaft portion.

3. (Previously Presented) The method for manufacturing a clutch housing according to claim 1, wherein a step of surface finishing is conducted after the third step.

4. (Previously Presented) The method for manufacturing a clutch housing according to claim 2, wherein a step of surface finishing is conducted after the third step.

5. (Previously Presented) The method for manufacturing a clutch housing according to claim 1, wherein the first step is conducted by hot forging, and the third step is conducted by cold forging.

6. (Previously Presented) The method for manufacturing a clutch housing according to claim 3, wherein the step of surface finishing includes grinding.

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7. (Previously Presented) The method for manufacturing a clutch housing according to claim 4, wherein the step of surface finishing includes grinding.

8. (Canceled).

9. (Previously Presented) A method for manufacturing a clutch housing, comprising the steps of:

(a) forming a work into a pre-product having a shaft portion and an outer drum portion integral with the shaft portion, the outer drum portion having an outer peripheral cylindrical portion joined to the shaft portion through a disk portion which is oblique with respect to an axis of the shaft portion such that the outer peripheral cylindrical portion is offset in an axial direction with respect to the shaft portion so that it is not opposite to at least part of the shaft portion in a radial direction;

(b) working said part of the shaft portion; and

(c) subjecting the pre-product to flow forming so as to form the pre-product into a substantially completed clutch housing having a spline on an inner periphery of the outer peripheral cylindrical portion.

10. (Previously Presented) The method for manufacturing a clutch housing according to claim 9, wherein

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step (b) includes forming oil holes in said part of the shaft portion.

11. (Previously Presented) The method for manufacturing a clutch housing according to claim 10, wherein the oil holes are substantially perpendicular to an axis of the shaft portion.

12. (Previously Presented) The method for manufacturing a clutch housing according to claim 10, wherein step (b) further includes forming a groove on an outer periphery of said part of the shaft portion.

13. (Previously Presented) The method for manufacturing a clutch housing according to claim 9, further comprising a step of surface finishing the substantially completed clutch housing.

14. (Previously Presented) The method for manufacturing a clutch housing according to claim 13, wherein the step of surface finishing includes grinding.

15. (Previously Presented) The method for manufacturing a clutch housing according to claim 9, wherein

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step (a) includes hot forging, and step (c) includes cold forging.

16. (Previously Presented) The method for manufacturing a clutch housing according to claim 9, wherein step (c) is conducted such that the disk portion becomes substantially perpendicular to the axis of the shaft portion and the outer peripheral cylindrical portion becomes substantially parallel to the axis of the shaft portion.

17. (Previously Presented) A method for manufacturing a clutch housing, comprising the steps of:

(a) forming a work into a pre-product having a shaft portion and an outer drum portion integral with the shaft portion, the outer drum portion having an outer peripheral cylindrical portion joined to the shaft portion through a disk portion which is oblique to an axis of the shaft portion such that the outer peripheral cylindrical portion is offset in an axial direction with respect to the shaft portion so that it is not opposite to at least part of the shaft portion in a radial direction;

(b) working said part of the shaft portion; and

(c) forming the pre-product into a substantially completed clutch housing having a spline on an inner periphery of the outer peripheral cylindrical portion.

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18. (Previously Presented) The method for manufacturing a clutch housing according to claim 17, wherein step (b) includes forming oil holes in said part of the shaft portion.

19. (Previously Presented) The method for manufacturing a clutch housing according to claim 18, wherein the oil holes are substantially perpendicular to an axis of the shaft portion.

20. (Previously Presented) The method for manufacturing a clutch housing according to claim 18, wherein step (a) includes hot forging, and step (c) includes cold forging.

21. (Previously Presented) The method for manufacturing a clutch housing according to claim 18, wherein step (c) is conducted such that the disk portion becomes substantially perpendicular to the axis of the shaft portion and the outer peripheral cylindrical portion becomes substantially parallel to the axis of the shaft portion.

22. (Previously Presented) The method for manufacturing a clutch housing according to claim 17,

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wherein step (a) includes hot forging, and step (c) includes cold forging.

23. (Previously Presented) The method for manufacturing a clutch housing according to claim 17, wherein step (c) is conducted such that the disk portion becomes substantially perpendicular to the axis of the shaft portion and the outer peripheral cylindrical portion becomes substantially parallel to the axis of the shaft portion.